1-42. (CANCELED)

43. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

actuating one of a starting clutch or gear box in the drive train by the control and regulating device such that torque transmission capacity oscillates with the frequency of the disturbing vibration and has a phase offset in relation to the disturbing vibration through which the amplitude of the disturbing vibration is reduced to a predetermined value.

44. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

braking an input shaft of the drive train by applying a service brake actuated by the control and regulating device such that with a rise in the vibration amplitude of the disturbing vibration, the service brake brakes the transmission input shaft to a rotational speed that reduces the amplitude of the disturbing vibration to a predetermined value.

45. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

arranging an abrasion-free permanent brake actuated by the control and regulating device behind a transmission such that with a rise in the vibration amplitude of the disturbing vibration, the permanent brake brakes a rotational speed of wheel drive shafts such that the amplitude of the disturbing longitudinal oscillation is reduced to a predetermined value.

46. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

actuating a motor vehicle internal combustion engine by the control and regulating device such that a rotational speed of the internal combustion engine oscillates with a frequency of the disturbing vibration, but has a phase offset in relation to the frequency of the disturbing vibrations through which the amplitude of the disturbing vibration is reduced to a predetermined value.

47. (CURRENTLY AMENDED) The method according to claim 46, further comprising the steps of ~~the control and regulating device increases~~ increasing a

~~switching~~ idling rotational speed during a switching travel ~~recognized by this, preferably an idling rotational speed of the internal combustion engine~~ via the control and regulating device, such that the amplitude of the disturbing vibration is reduced to the predetermined value.

48. (CURRENTLY AMENDED) The method according to claim 47, further comprising the steps of increasing the switching rotational speed of the internal combustion engine ~~is increased~~ step by step until the amplitude of the disturbing vibration is reduced to the predetermined value.

49. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

activating a second clutch of a double clutch transmission in addition to a first clutch according to torque transmission capacity, with such a vibration phase offset in relation to the disturbing vibration until an amplitude of the disturbing vibration is reduced to a predetermined value.

50. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

activating a synchronization device for a non-shifted transmission step in connection with a gear box with such a vibration phase offset until the amplitude of the disturbing vibration is reduced to a predetermined value.

51. (CURRENTLY AMENDED) A method for reducing disturbing vibrations in a motor vehicle comprising the steps of:

determining the disturbing vibrations by a control and regulating device using suitable sensors;

activating at least one device when previously established limiting values are exceeded by the control and regulating device such that an amplitude of the disturbing motion is completely eliminated or at least damped;

~~influencing~~ braking at least one mechanical frictional torque transfer rotating component in a motor vehicle drive train with the at least one device such that a latter component or components is/are continuously or periodically braked in rotary motion when the disturbing vibrations occur or is/are excited to a compensatory vibration; and

determining via the control and regulating device rotational speeds of a clutch input side and a clutch output side with aid of rotational speed sensors, and ascertaining motor vehicle acceleration by the control and regulating device with aid of a sensor unit that recognizes longitudinal acceleration.

52. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with actuating devices (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a

damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein a disturbing motor vehicle longitudinal oscillation~~, preferably~~ in a region of a motor vehicle seat (37)[[,]] can be recorded with the vibration sensor (41).

53. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with actuating devices (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein the control and regulating device (24) is connected to an actuating device (7) for activating a clutch (4) via a control line (31).

54. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with actuating devices (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or

braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein the control and regulating device (24) is connected to an actuating device (15) for activating a synchronization device (10) in a gear box (8) through a control line (27).

55. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with actuating devices (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein the control and regulating device (24) is connected to a service brake (11) for braking a transmission input shaft (3) of a gear box (8) through a control line (26).

56. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with at least an

actuating device (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein the control and regulating device (24) is connected to an abrasion-resistant permanent brake (23) for braking motor vehicle drive shafts (18) through a control line (28).

57. (CURRENTLY AMENDED) A device for reducing disturbing vibrations in a drive train and in a motor vehicle in which the disturbing vibrations are determined by a control and regulating device which is connected with one or more of rotational speed sensors (34, 36) and vibration sensors (41) via sensor leads (32, 33, 35), for a purpose of recording the disturbing vibration, the control and regulating device is connected through signal engineering via control leads (25, 26, 27, 28, 29, 30, 31) with at least an actuating device (7, 11, 15, 21, 22, 23), the control and regulating device being activated when previously established limiting values are exceeded by the control and regulating device such that the disturbing vibration is completely eliminated or at least damped in amplitude, the control and regulating device ~~acts on~~ braking at least one mechanical frictional torque transfer rotating component in the drive train such that a latter component or components is/are continuously or periodically brought into vibration or braked in rotary motion when the disturbing vibrations occur or are excited to a compensatory vibration causing one or more of a vibration frequency, vibration amplitude and vibration phase angle to be constructed in relation to the one or more of a frequency, amplitude and vibration phase angle of the disturbing vibration causing a damping of the amplitude of the disturbing vibration with a superposition with the disturbing vibration; and

wherein the control and regulating device (24) is connected ~~to a rotational speed actuating device, preferably~~ to a power actuator on an internal combustion engine (1) of the motor vehicle via a control line (25).